Dept. of Labor & Industries Boiler Section Olympia, WA 98504



## KEEP YOUR WATER HEATER **SRFE**

Household hot water heaters are so common and trouble-free that their safe operation often is taken for granted. Yet the potential for a serious accident does exist when water heaters are not routinely inspected.

## What causes a hot water heater to explode?

Excessive temperature when combined with tank corrosion can cause a "pressure-heat rupture" or explosion. If the water temperature is below 212 degrees fahrenheit, the primary danger is scalding. However, if the water temperature is above 212 degrees, it will turn into steam, expand to 1,700 times its space as water and cause a violent explosion.

## Is there any warning?

If steam comes from a hot water faucet, the situation is dangerous. Heat input to the tank should be immediately shut off and the thermostatic control then should be replaced by a competent repairman.

## Potential danger can be minimized by:

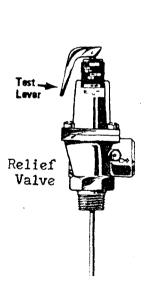
Make sure that your heater has a relief valve. The preferred type of relief valve is a combination pressure/temperature model that will function to prevent dangerous temperature rise as well as prevent overpressure of the heater tank.

Test the relief valve at least annually. Lifting the lever allows water to discharge and indicates that waterways are clear. To avoid scalding in the event of an excessive heat buildup, a drain line should be attached to the relief valve.

Check to make sure that the relief valve capacity is adequate and that the pressure setting is below the heater tank working pressure. This can be determined by comparison of this information on the relief valve and heater tank nameplates.

If leakage from the tank is observed, discontinue use and shut off heat input until the source of the leak is found. If the tank itself is leaking, it probably is corroded through. REPLACE THE TANK.

The owner's information pamphlet provided by the manufacturer is a valuable source of information about safe operation and installation.



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